



Androgen Exposure and Sensation-Seeking in Young Males

Citation

Campbell, Bruce C., Peter B. Gray, Anna Dreber, Carmel Apicella, A. Little, and Peter T. Ellison. 2008. Androgen exposure and sensation-seeking in young males. Abstracts of the 33rd annual meeting of the Human Biology Association to be held in Columbus, Ohio, April 9-10, 2008. American Journal of Human Biology 20(2): 215-216.

Published Version

<http://dx.doi.org/10.1002/ajhb.20760>

Permanent link

<http://nrs.harvard.edu/urn-3:HUL.InstRepos:2894770>

Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Open Access Policy Articles, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#OAP>

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)

Androgen exposure and sensation-seeking in young males

Bruce C. Campbell, Peter B. Gray, Anna Dreber, Carmel Apicella, A. Little, Peter T. Ellison

Abstract:

Testosterone is thought to be associated with short attention spans, increased novelty, and thrill seeking and behavioral disinhibition in men. However, there is little empirical evidence for such associations among normal males. Here we test three separate measures of androgenicity; salivary testosterone (current exposure), facial masculinity (pubertal exposure), and 2D:4D digit ratio (prenatal exposure) as predictors of sensation-seeking in young men. Participants were 98 young men between the ages of 18 and 23. An unstimulated saliva sample was collected for determination of testosterone and participants completed a questionnaire, including Zuckerman's sensation-seeking scale. Facial photos were obtained and rated for masculinity by anonymous observers. Both right and left hands were scanned to determine 2D:4D digit ratios. In univariate analyses, salivary testosterone ($n = 91$; $r = 0.22$; $P = 0.04$) and facial masculinity ($n = 91$; $r = 0.23$; $P = 0.04$) were significant predictor of boredom susceptibility, but not the disinhibition, thrill-seeking, experience seeking subscales. 2D:4D was not associated with any of measure of sensation-seeking. In multivariate models, facial masculinity was a significant predictor of boredom susceptibility ($n = 82$; $b = 0.35$; $P = 0.001$), controlled for left 2D:4D and salivary testosterone. These results suggest that among men, current and pubertal testosterone exposure are associated with greater need for immediate stimulation, but not other forms of sensation-seeking. This result is consistent with previous findings of a positive relationship between salivary testosterone and delayed discounting, and may reflect the impact of testosterone on dopaminergic reward mechanisms.